

*Air Quality Management
Subcommittee
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Current and Upcoming Air Quality Challenges

Presentation by
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Statement of Task

- Develop scientific and technical recommendations for strengthening the nation's air quality management system with respect to the way it:
 - **Identifies and incorporates important sources of exposure to humans and ecosystems and**
 - **Integrates new understandings of human and ecosystem risks.**
- The committee will conduct a scientific and technical evaluation of the effectiveness of the major air quality provisions of the Clean Air Act and their implementation by federal, state, and local government agencies.
- Specifically the Committee will:
 - **Address scientific and technical aspects of the policies and programs intended to manage important air pollutants including, but not limited to, national ambient ("criteria") pollutants and air toxics.**
 - **Evaluate scientific and technical aspects of current approaches for health and environmental problem identification, regulatory standards development, air quality management plan development, plan implementation, and progress evaluation.**
 - **Stratospheric ozone protection and greenhouse gas emissions will not be included in the scope of the study, except in regard to strategies to control emissions from sources in tropospheric air quality control programs.**

3) Assessing Status and Measuring Progress

- Emissions trends
- Air quality trends
- Health effects trends
- Ecosystem trends
- Institutional accountability

Chapter 6

1) Setting Standards and Objectives

- Emissions standards
- Ambient air quality standards
- Reducing acid deposition
- Reducing regional pollution
- Protecting visibility

Chapter 2

Scientific and Technical Foundation

Monitoring:

- Emissions
- Ambient air quality
- Health and exposure
- Ecosystems
- Meteorology

Analysis:

- Models (e.g., air quality, emissions)
- Economics
- Health and ecological risk assessment

Research:

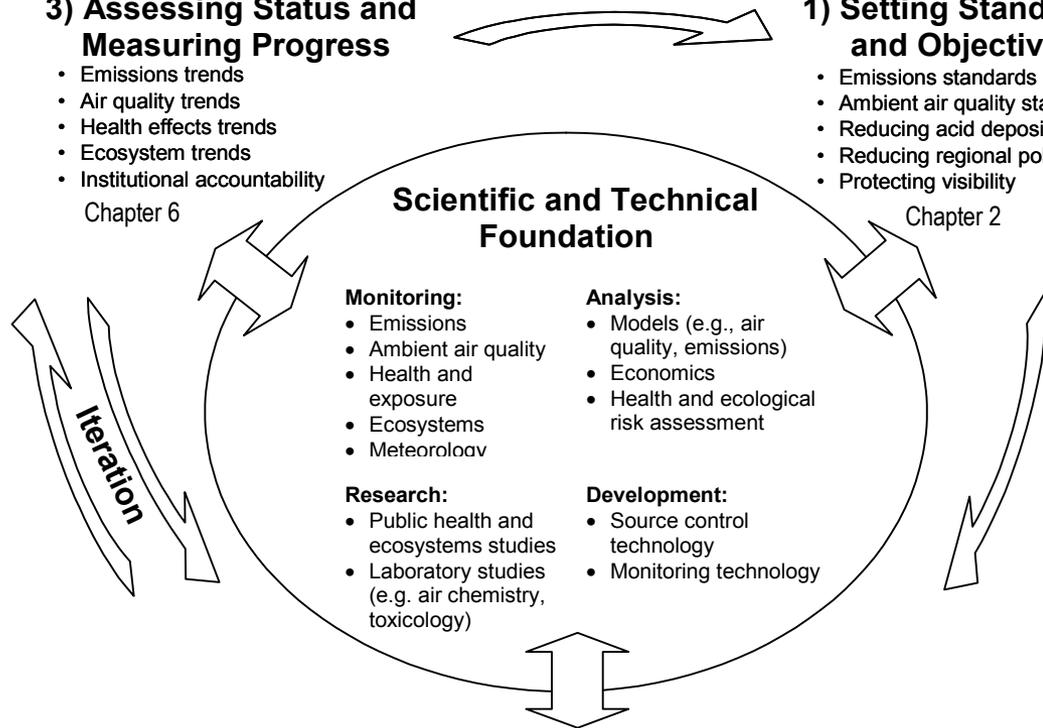
- Public health and ecosystems studies
- Laboratory studies (e.g. air chemistry, toxicology)

Development:

- Source control technology
- Monitoring technology

2) Designing and Implementing Control Strategies

- Source control technology requirements
- Emissions caps and trading
- Voluntary or incentive -based programs
- Energy efficiency
- Pollution prevention (e.g., product substitution and process alteration)
- Compliance assurance



Program Challenges Ahead

- Meeting NAAQS for O₃ and PM_{2.5} and Reducing Regional Haze
- Designing and Implementing Controls for Hazardous Air Pollutants
- Protecting Human Health and Welfare in the Absence of a Threshold Exposure
- Ensuring Environmental Justice
- Assessing and Protecting Ecosystem Health
- Mitigating Intercontinental and Cross-Border Transport
- Maintaining AQM System in the Face of Changing Climate

Long-Term Objectives for AQM to Meet Future Challenges

To Meet These Challenges, The AQM Should Strive To:

- Identify and Assess Most Significant Exposures, Risks, and Uncertainties
- Take an Integrated Multipollutant Approach to Mitigating Most Significant Risks
- Take an Airshed-Based Approach to Controlling Emissions
- Emphasize Results Over Process, Create Accountability, and Dynamically Adjust

Recommended Changes to the AQM System

1. Strengthen Scientific and Technical Capacity
2. Expand National and Multistate Control Strategies
3. Transform the SIP Process
4. Develop Integrated Program for Criteria and Hazardous Air Pollutants
5. Enhance Protection of Ecosystems and other Public Welfare

AQM Approaches

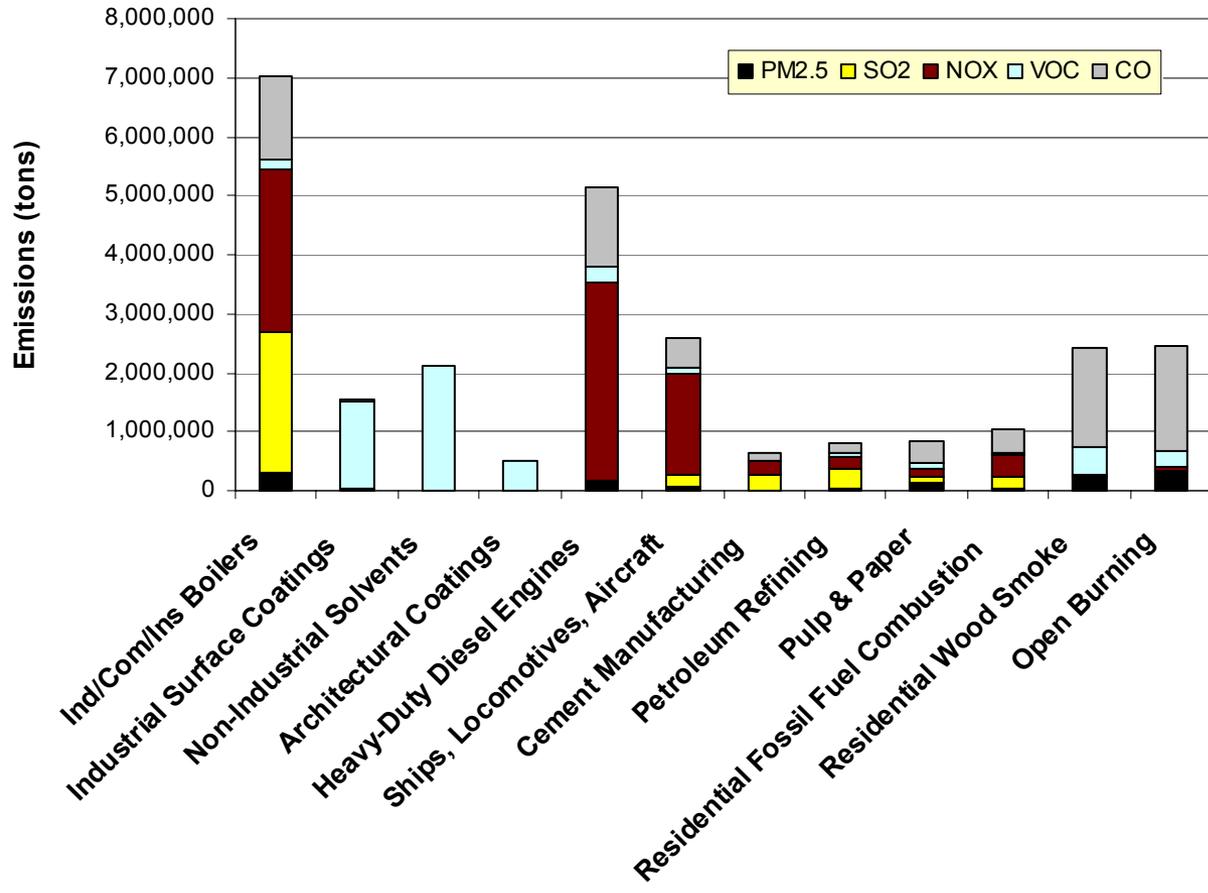
- The AQM system should strive to;
 - Identify and Assess Most Significant Exposures, Risks, and Uncertainties
 - Take an Integrated Multipollutant Approach to Mitigating Most Significant Risks
 - Take an Airshed-Based Approach
 - Emphasize Results Over Process, Create Accountability, and Dynamically Adjust
- Achieving These Aims Cannot Be Done Overnight
 - Will Require a Staged Transition
 - Continue to Make Progress While in Transition

Air Quality Management Work Group

- 38 Recommendations
- Significant unresolved Issues
- EPA Implementation Commitment
- Establish AQ Mgt Subcommittee

Management Challenges

- Resources
- Political Considerations
- Multiples Constituents
- Business As Usual vs New Approaches
- Legal Authority
- Implementation Barriers



Challenges Ahead for AQ Management Subcommittee

- Tracking Implementation of Phase I Recommendations
- Phase I – Unresolved Issues
 - ❖ Expansion of Ambient Monitoring, etc.
 - ❖ SIP issues
 - ❖ National Emission Control Measures
 - ❖ Conformity
- NAS Issues Remaining
 - ❖ Air Toxics – Hotspots
 - ❖ Environmental Justice
 - ❖ Transportation / Land Use
 - ❖ Agricultural Practices
 - ❖ Climate Change Implications.

Recent AQ Program Successes

- Proposal Revision to PM NAAQS
- CAIR – NO_x & SO_x
- In-Use HD Diesel Monitoring
- Diesel Retrofit Programs
- US/Mexican Border Initiative

Leveraging Leadership & Innovations

- Local / State AQ Strategies
- Partnerships – Gov't/NGO/Private
 - ❖ Technology Demonstrations
 - ❖ Enhanced Air Quality Information
 - ❖ Emission Reduction Agreements
 - ❖ Supplemental Environmental Projects

AQ Management Subcommittee Going Forward

- High Quality Information
- Open Dialogue
- Reality Checking
- Seek to Make Progress